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California Postsecondary Education Commission

# Moving Forward: The Evolving Performance Assessment Framework

In June 2006, the Commission adopted an Accountability Framework for Higher Education. The framework consisted of four goals and 17 measures for evaluating the performance of public higher education in California. The framework was developed in consultation with the Commission's Accountability Technical Advisory Committee that consisted of representatives from the public higher education systems and researchers who had worked on accountability issues.

After the Commission developed the initial framework, staff produced reports for each of the performance measures, as well as a final summary report of the overall findings from the performance assessment process. This was the first effort of its kind for the Commission. The initial series of reports presented a variety of information on the affordability of postsecondary education, access to colleges and universities, and success and progress of students. In addition, the first year of reporting offered insight to how well the framework measured the performance of California's higher education system and what needs to be done to make it more useful.

Some of the key lessons learned in the initial year of reporting were as follows:

- Statewide goals must strike a balance between clearly defining the desired direction for higher education performance and being too prescriptive or narrowly stated.
- Some goals may innately be in conflict with one another. Successful performance in one area may contribute to less success in another area.
- Performance indicators should be few in number. Measured outcomes should reasonably be attributed as a direct result of higher education performance.
- A successful framework and reporting is dependent on reliable and complete data sources. Data proved to be an obstacle in reporting on some measures.

The Commission is refining its performance framework. Developing this system will evolve each year as goals and measures are refined and staff develop a greater understanding of how the available data can be shaped into useful performance measures. The Commission strives to produce a fair and precise instrument of evaluation that will enable it to provide useful information to policymakers and guide beneficial change in public higher education.

## Refinements to the Measures and Goals

Establishing goals is the cornerstone of any effort to measure performance. A concise statement of goals provides a universal understanding of what the state is seeking from its higher education system. Goals for higher education are inherently intertwined, and defining them clearly is a challenge in performance assessment. An improvement in performance in one area may result in a decline in progress toward another goal. In an environment of limited resources, trade-offs in goal attainment may be un-

avoidable. Performance assessment must balance priorities and goals should not be established or evaluated independently of one another. For this reason, a simple framework for performance measurement will yield the best results with minimal overlap of goals.

Performance measurement works best when operating under a few basic principles. Primarily, it is important to minimize the number of measures that correspond to each goal and to use measures that provide the strongest indication of progress toward goal attainment. Measures will vary slightly between the higher education systems to account for different institutional missions but are intended to collectively provide an improved understanding of how higher education is functioning from a statewide perspective.

## **The Revised Performance Assessment Framework**

The goals in the revised framework do not differ greatly from the original goals. The framework is evolving into clearer and more concise statements of desired outcomes. The performance indicators have been revised to include new measures that align more closely with these goals, and to drop former measures that proved to have little utility in the assessment process. Other measures were dropped from the framework due to data limitations or unreliability.

Each of the four areas for assessment is identified as a question and contains a goal statement identifying the desired outcome. The areas of assessment are Preparation, Student Success, Affordability, and Public Benefit.

### **Preparation for postsecondary education**

Measuring the degree to which students are sufficiently prepared for higher education is a foundation for understanding issues of college access and student success at college. Adequate preparation for postsecondary education will ensure that students are provided with the basic education and skills needed to pursue ongoing learning, whether that learning happens in a classroom or on the job.

#### *Measures of preparation*

There is no shortage of possible measures for student preparation and this is the only area of the framework that will require additional study to narrow the number of performance measures identified here. Standardized tests administered to students from junior high through high school, college preparatory exams, high school course completion, graduation rates, college-going rates, and remediation rates have all been considered as indicators of college preparedness. However, some of the measures discussed will, inevitably, exclude some portion of the relevant population. For example, college preparatory exams, Advanced Placement test passage, and university remediation rates evaluate only the performance of college-bound students. Problems with other measures — such as math proficiency exams taken in the 7th grade or the California High School Exit Exam (CAHSEE) that can be taken multiple times in different years by the same student — present complications for meaningful data analysis. Therefore, Commission staff proposes the following measures for consideration with the intention of further evaluation to develop precise methods for interpretation.

*Additional comments on specific measures*

**English Proficiency** — A previous Commission study found that English proficiency has a significant impact on incomes, and is also a predictor of the ability to succeed in postsecondary education. The California Achievement Test (CAT) and the California Standards Test (CST) in English/Language Arts are possible measures for gauging levels of English proficiency. Commission staff intends to review data for the CAT and CST more closely to determine which exam would provide the most reliable data regarding student preparation.

**CAHSEE Scores** — Students can take the CAHSEE exam in the 10th, 11th, or 12th grade. They can take the exam more than once, and the results data cannot be cross-referenced by unique student identifying numbers. The best method for evaluating this measure is to pick only one grade level to analyze.

**University Remediation** — This measure will exclude many of the students who attend high school because it examines only preparation of college-going students. Nonetheless, it is an important measure because it provides an indication of the alignment between secondary and postsecondary education and can reveal if the top one-third of high school graduates are prepared for university-level instruction. It may also point out inconsistency in what is measured by high schools, through the CAHSEE and CST scores and what is measured by the college proficiency exams (the assessments that result in students being placed in remedial courses).

**Student success**

For the vast majority of students entering college, the ultimate desired outcome is to earn a degree or certificate, or to transfer to another institution where that outcome will be achieved. Significant financial investment is made in each student enrollment, by the individual and their families, and also by the state. Those investments are maximized by successful degree completion. In addition to ensuring that more students are succeeding, it is critical to the state's social and economic welfare that equity in success rates exists across racial/ethnic groups, socioeconomic levels, and gender.

**Preparation Question**

Are high school students receiving sufficient preparation to enter postsecondary education with the basic skills needed for success and continued lifetime learning?

**Preparation Goal**

Progress in elevating levels of basic math and English proficiency and attainment of high school diploma; success in narrowing the achievement gap among racial/ethnic groups, socioeconomic levels, and gender.

**Measures**

Scores on English/Language Arts CAT and CST  
CAHSEE Scores  
High school graduation rate  
Percent of students completing a–g requirements  
Percent of students taking the SAT  
Percent of students taking one or more Advanced Placement courses  
Number of Advanced Placement courses taken  
University remediation

**Disaggregated by**

High school API  
Income  
Race/Ethnicity  
Gender

Measures of Student Success

The performance indicators used to measure student success are more evident than in the other performance areas. Student persistence, completion and transfer rates, and time-to-degree are universally accepted measures of performance in higher education. In moving forward with the framework, measures for student success will remain the same, but the method by which staff evaluates the measures will evolve.

Previous reports examined each measure of student success independently of the other measures. In future evaluation of student success, a more detailed picture of performance would be achieved by selecting cohorts and identifying persistence, completion and transfer, and time-to-degree rates using longitudinal analysis. By moving away from “snapshot” analysis, and following a cohort over six years, analysts will be in a better position to not only identify trends, but to understand why trends might be occurring. It is important that all measures are disaggregated by race/ethnicity, gender, and income to offer a complete picture of how student success varies across demographic groups.

Additional comments on specific measures

*Direct college-going rates* — The last round of performance measurement used college-going rates to measure student preparedness for college. But because of the numerous factors that can affect college going, this is not a measure of student preparation. Rather, it represents the combined effect of student preparation, actual and perceived cost of college attendance, and student choice. College-going rates will remain a tool of performance measurement as a starting point for measuring the progress of cohort groups in postsecondary education.

*Persistence rates* — A preliminary study of student persistence, using the Commission’s student data, is needed to determine the points in a college career, which may differ between systems, when students are most likely to drop out. Following that determination, the measuring point for persistence rates will be set.

*Time-to-certificate, transfer, or degree* — Staff’s previous evaluation of time-to-degree is expanded to measure the length of time it takes to achieve one of three outcomes at the community colleges and one outcome at the university systems. Community college time-to-certificate, time-to-degree, or transfer will be evaluated on a three-year timeline. Obtaining a bachelor’s degree as an incoming transfer student will also be evaluated on a three-year timeline, and obtaining a bachelor’s degree as a first-time freshman will be examined on a six-year timeline. The three- and six-year timelines reflect 150% of the normative time-to-degree.

Student Success Question

Are students of all racial/ethnic and socioeconomic backgrounds achieving comparable levels of success in college persistence and degree/certificate completion?

Student Success Goal

Historically underrepresented students will achieve progress toward equitable levels of success as those student groups which have always maintained higher levels of success.

Measures

- Direct college-going
- Time to community college certificate, degree, or transfer
- Persistence
- Degree completion / time-to-degree

Disaggregated by

- Income levels
- Race/ethnicity
- Gender
- Full-time/part-time status

## Affordability

Although California institutions of public higher education remain some of the most affordable in the nation in terms of fees, the overall cost of attendance has ballooned considerably in recent decades. Citing extraneous factors and declining General Fund support, the systems have justified increases in tuition and fees as a means to cover increasing costs for competitive faculty and administrative salaries, new classroom and laboratory technology, and updated living and recreational facilities. Still, tuition and fees are not the only cost factors squeezing students and their families. The sky-high cost of housing in California accounts for a lion's share of the overall cost of attending college. Due to a variety of factors beyond the cost of tuition and fees, making college more affordable boils down to only a few plausible solutions: increase the availability of financial aid to lower and middle-income students, provide students with a structured guidance path toward timely degree completion, and reduce underlying costs by efficiencies in operations so that college and universities can deliver their service at less cost.

### *Measures of Affordability*

Measuring college affordability is challenging and complex, particularly when addressing questions of why cost of attendance is becoming such of a burden to families. There are a multitude of factors, such as housing, food, and transportation, that are not related to fees but create the majority of college-related expenses.

Perhaps the greatest complexity to the affordability issue is in understanding the financial aid system and determining how financial awards impact students and families from varying income backgrounds. Additional obstacles to analyzing this issue are incomplete income data for students and incomplete data on all types of borrowing for college. Any debt analysis will likely underestimate levels of borrowing due to the many lending sources available to students and families for which reliable data are not readily retrievable.

### *Additional comments on specific measures*

*Unmet financial need and total cost of attendance* — These measures will be evaluated by income categories to determine how much students from various income levels will pay after financial aid packages, including loans, have been applied to overall costs.

*Average indebtedness upon completion* — This measure will be examined in combination with student enrollment status, whether a student attends on a full-time or part-time basis. Students may feel that they are avoiding excess debt by working more and attending school part-time, thus extending their time-to-degree. Is there evidence that prolonging degree completion by attending part time actually diminishes levels of student indebtedness and affects student success?

### **Affordability Question**

Are the net costs of attending higher education institutions in California at reasonable and stable levels so as to preserve access to all students who desire a postsecondary education?

### **Affordability Goal**

Student fees and other costs of college remain stable and manageable, with changes tied to general cost-of-living; students graduate with reasonable and manageable levels of debt that do not impede on personal career choices or continued education.

### **Measures**

Unmet financial need  
Total cost of attendance  
Average indebtedness upon completion

### **Disaggregated by**

Family income levels  
Segment  
Enrollment status

Public benefit

The missions of the higher education systems differ considerably and contribute to the public benefit in varying ways. The University of California fulfills a mission of “discovering and advancing knowledge” by fostering intellectual enlightenment and providing research and technology innovation to support the state’s economy. The California State University also functions to advance knowledge and learning and offers instruction of applied disciplines. Many CSU graduates fill positions in areas of the high workforce needs, including the nursing and teaching professions. The community colleges have significant diversity in mission, providing open access and affordable course offerings to students seeking transfer to a baccalaureate institution, career training leading to a certificate, adult basic skills education, economic development, and arts and recreation. In light of the various benefits higher education provides, many of which are difficult to measure, the challenge in assessment of public benefit is to account for the numerous missions of public higher education and to use measures that are easily quantifiable and can reasonably be attributed to the efforts of postsecondary education.

Measures of Public Benefit

A well-educated citizenry provides many benefits to the community and is fundamental to a healthy democratic society. Colleges and universities can have substantial impact in the areas of workforce development, research and technology innovation, and continued adult education. In addition they provide numerous intangible public benefits, such as acting as forums for growth of ideas, cultural enrichment, and community building.

The complexity in measuring the public benefit of higher education is two-fold: First, the crafting of public benefit performance indicators must consider the diverse missions of the university systems and their contributions to the state; and second, the need to demonstrate a direct connection between the outcomes and the impact of postsecondary education as opposed to other social, cultural or economic activities that have public benefit outcomes. Given those considerations, staff recommends only two performance measures related to fulfilling the state’s workforce needs. While workforce outcomes are incomplete in measuring the full scope of benefit provided by the systems of higher education, they are easily quantifiable and relate to higher education’s primary statewide utility.

Additional comments on specific measures

Degrees awarded in areas of workforce need — Some degrees, such as Nursing, are very specific in their instruction; graduates in such disciplines are intended to enter a narrowly defined field. However, most occupations are more flexible and diverse in the degree discipline that can fill a job position. Commission staff has developed the Higher Education Workforce Allocation System (HEWAS), using data from the Bureau of Labor Statistics, which matches the many disciplines that can feed into a single

Public Benefit Question

Is higher education responding to the social and economic needs of the state and contributing to California’s overall advancement and well-being?

Public Benefit Goal

Institutions of higher education achieve a reasonable balance of preparation for the workforce to ensure economic well-being and fostering personal, societal, and cultural growth.

Measures

- Degrees awarded in areas of identified workforce need
- Degrees awarded as a percent of college-age population
- Percent of workers with degrees working in non-degree jobs

Disaggregated by

- Segment
- Age group



occupation; and conversely, the many occupations that can be entered following study in a single discipline. HEWAS will be an important asset in evaluating the connection between degrees awarded and workforce need.

*Degrees awarded as a percent of college-age population* — A recent report by the Western Interstate Commission for Higher Education (WICHE) determined that educational attainment is declining by generation. This measure will evaluate California's progress toward ensuring that younger generations are advancing in educational attainment for the future benefit of California's economy.

## **Next Steps**

A few measures identified in this paper will require preliminary analysis in the coming months to narrow which measures are best for determining progress toward higher education goals. Commission staff will conduct a statistical analysis to resolve the greatest academic predictors of student preparation for college, and incorporate such measures into the framework.

In the coming months, Commission staff will examine measures previously studied, specifically relating to the goals of affordability and student success, and assess how and why certain trends are occurring. The June 2008 Commission agenda will include a report that will look at trends in affordability and college costs over several decades to determine the extent to which college is becoming a greater financial burden to families across various income levels.

The Commission intends to move forward with performance assessment of public higher education using these goals, which are similar to the previous goals but stated more precisely, and narrowing the number of corresponding performance measures. The revised framework offers greater simplicity while providing the same degree of robustness in evaluation. After analysis in the coming months to determine best methods for assessment and formal adoption of the proposed measures, staff will begin the next round of performance assessment.